

# Voluntary Export Restraints under Asymmetric Information

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## ABSTRACT

ABSTRACT This paper examines policy implications of voluntary export restraints (VER) under asymmetric information. In this case of Cournot competition, we discuss domestic incomplete information toward foreign firm and foreign incomplete information on domestic firm. We show VER will reduce the profit of foreign firm when there is incomplete information on foreign firm. Under foreign incomplete information on domestic firm, foreign firm's profit is not affected. When domestic incomplete information toward foreign firm is incorporated with Bertrand competition, foreign firm's profit remains unchanged.

Keywords : Voluntary Export Restraints ; Asymmetric Information ; Bayesian Nash Equilibrium ; Duopoly ; Cournot Competition ; Bertrand Competition

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## REFERENCES

- 一、中文部分 1. 巫和懋 & 夏珍, 「賽局高手 - 全方位策略與應用」。台北:時報, 民國九十一年。 2. 洪進明, 「由美日貿易摩擦探討美國未來貿易政策之走向」。碩士論文, 中國文化大學美國研究所, 民國八十六年。 3. 徐敏怡, 「國際經濟法上自動出口設限協定之探討」。碩士論文, 國立台灣大學法律學研究所, 民國八十一年。 4. 陳志安, 「雙佔下關稅與進口限額等價之分析: 猜測變量模型之應用」。碩士論文, 國立清華大學經濟學研究所, 民國八十年。 5. 莊春發, 「個體經濟學講義(二)」。台北:瑞興圖書, 民國八十二年。 6. 郭淑敏, 「戰後美日貿易摩擦之研究」。碩士論文, 淡江大學美國研究所, 民國八十五年。 7. 劉大宏, 「基本異質雙占模型 - Cournot, Bertrand, Cournot - von Stackelberg, Bertrand - von Stackelberg模型的比較分析」。碩士論文, 國立中正大學國際經濟研究所, 民國八十二年。 8. 劉仁傑, 「日本產業政策」。台北:聯經, 民國八十一年。 9. 劉碧珍、陳添枝、翁永和, 「國際貿易理論與政策」。台北:雙葉, 民國九十一年。 10. 謝依玲, 「產業政策對戰後日本經濟發展之影響」。碩士論文, 中國文化大學日本研究所, 民國八十六年。
- 二、英文部分 1. Anis, A. H. and T. W. Ross, 1992, "Imperfect Competition and Pareto-Improving Strategic Trade Policy," *Journal of International Economics* 33, 363-371. 2. Benjamin, D.K., 1999, "Voluntary Export Restraints on Automobiles," PERC Reports 17. 3. Brainard, S.L. and D. Martimort, 1992, "Strategic Trade Policy with Incompletely Informed Policy Makers," NBER working paper 4069. 4. Brainard, S.L. and D. Martimort, 1996, "Strategic Trade Policy Design with Asymmetric Information and Public Contracts," *Review of Economics Studies* 63, 81-105. 5. Brainard, S.L. and D. Martimort, 1997, "Strategic Trade Policy with Incompletely Informed Policymakers," *Journal of International Economics* 42, 33-65. 6. Collie, D. and M. Hviid, 1994, "Tariffs for a Foreign Monopolist under Incomplete Information," *Journal of International Economics* 37, 249-264. 7. Dickinson, D.G. and S.M. Murshed, 1994, "Import Quotas or VERs to Protect Domestic Industry? A Three Country General Equilibrium Model," *Japan and World Economy* 6, 285-307. 8. Ethier, W.J., 1991, "Voluntary Export Restraints," in A. Takayama, M. Ohyama and H. Ohta, eds., *Trade, Policy, and International Adjustments*, New York: Academic Press, 3-18. 9. Gibbons, R., 1991, *Game Theory for Applied Economist*, Princeton University Press, Princeton, NJ. 10. Giovanni, M., 1999, "Strategic Trade Policy under Incomplete Information," *International Economic Review* 40, 571-594. 11. Goldberg, P.K., "Trade Policies in the U.S. Automobile Industry," *Japan and World Economy* 6, 175-208. 12. Harris, R., 1985, "Why Voluntary Export Restraints are 'Voluntary'," *Canadian Journal of Economics* 18, 799-809. 13. Hwang, H. and C.C. Mai, 1988, "On the Equivalence of Tariffs and Quotas under Duopoly: A Conjecture Variation Approach," *Journal of International Economics* 24, 373-380. 14. Itoh, M. and Y. Ono, 1982, "Tariffs, Quotas, and Market Structure," *Quarterly Journal of Economics* 97, 295-305. 15. Itoh, M. and Y. Ono, 1984, "Tariffs vs. Quotas under Duopoly of Heterogeneous Goods,"

Journal of International Economics 17, 359-373. 16. Ishikawa, J., 1994, " Ranking Alternative Trade-Restricting Policies under International Duopoly, " Japan and World Economy 6, 157-169. 17. Krugman, P.R. and M. Obstfeld, 2000, International Economics, Theory and Policy. 18. Lai, P.Y., 1996, " On the Equivalence of Tariffs and Quotas under Incomplete Information, " Three Essays on Duopolistic Competition under Asymmetric Cost Conditions 63-74, Ph.D. dissertation, SUNY Buffalo. 19. Maggi, G., 1996, " Strategic Trade Policy with Endogenous Mode of Competition, " American Economic Review 86, 237-258. 20. Mai, C.C. and H. Hwang, 1988, " Why Voluntary Export Restraints are Voluntary: An Extension, " Canadian Journal of Economics 4, 877-882. 21. Qiu, L., 1994, " Optimal Strategic Trade Policy under Asymmetric Information, " Journal of International Economics 36, 333-354. 22. Suzumura, Kotaro and J. Ishikawa, 1997, " Voluntary Export Restraints and Economic Welfare, " The Japanese Economic Review 48, 176-186.